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COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
FIELD OPERATIONS - WASTE MANAGEMENT
1012 Water Street
Meadville, Pennsylvania 16335
Telephone: A. C. 814/332-6848
November 7, 1991

Subject: Millcreek Superfund Site
Erie County

Mr. Anthony Koller (3HW21)
Remedial Project Manager
U.S. Environmental Protection Agency
Region III
841 Chestnut Building
Philadelphia, PA 19107

Dear Mr. Koller:

The Pennsylvania Department of Environmental Resources (PA DER) has completed its review of the portions of the Millcreek Superfund Site Construction and Flood Retention Basin (FRB) Design Report that would be regulated by the Pennsylvania Dam Safety & Encroachments Act. The following comment is a State Applicable or Relevant and Appropriate Requirement (ARAR):

- The Department's Chapter 105 Rules & Regulations would require a minimum design storm of 100-year return period for a dam with this classification. The dam may be able to safely pass the 100-year storm, but the information submitted does not demonstrate this. No calculations are shown for the 100-year flood. Since the dam is being built as a flood retention basin, the probable downstream hazard potential classification is 2.

The following comments are not State ARARs but should be considered in the FRB design:

- There is a discrepancy in the invert of this 2.5/ft. by 4.5/ft. low-level outlet. It is given as 709.5 in Table 2 on Page 15 of the 100% Submittal Design Analysis Report and is shown as 709.5 on the "FRB CONTROL STRUCTURE PLAN" on Sheet C-16, but 709.0 is used in the routing (See HEC-1 input, line 171). It is acknowledged that the effect of this discrepancy on the routing would be negligible.

- The degradation of filter material versus the specified perforation of the pipe is questionable according to U.S. Bureau of Reclamation (USBR) and U.S. Army Corps of Engineers (USACOE) guidelines. The following criteria are not met:

  o D85f/Max. pipe opening > 2 (USBR, 1987)

    D50f/Slot width > 1.2 (USACOE, 1986)

- The design of the geotextile selected for the toe drain should be based on the embankment fill material properties regardless of source.

- A fine grained soil should be specified for structural backfill along the FRB control structure.

If you have any questions, please contact me at this office.

Sincerely,

Nancy L. Snyder

Nancy L. Snyder
Project Manager
Hazardous Sites Cleanup Program
Northwest Region

NLS/sn

cc: Mr. Japp
Mr. Miller
Mr. Leaver
Mr. Gorman